Course Code: 1910501 **MLRITM- R19**

MARRI LAXMAN REDDY
INSTITUTE OF TECHNOLOGY AND MANAGEMENT
(AN AUTONOMOUS INSTITUTION)
(Approved by AICTE, New Delhi & Affiliated to JNTUH, Hyderabad)
Accredited by NBA and NAAC with 'A' Grade & Recognized Under Section2(f) & 12(B)of the UGC act,1956

I B.Tech I Sem Supply End Examination, November 2020

PROGRAMING FOR PROBLEM SOLVING

(CIVIL, MECH, ECE)

Time: 2 Hours. **Max. Marks: 70**

Note: 1. Answer any FIVE questions.
2. Each question carries 14 marks and may have a, b as sub questions.

1	a)	Write a C program to perform binary arithmetic operations using switch statement.	5M
	b)	Explain type conversions with an example program.	5M
	c)	Differentiate between while and do-while loop statements.	4M
2	a)	Explain different storage classes in C.	8M
	b)	Define a flowchart? Draw the flowchart to find the smallest of given three numbers.	6M
3	a)	Define a pointer? Write a C program to print array elements using a pointer.	6M
	b)	Explain different string handling function in C.	8M
4	a)	Explain include, define, undef, if preprocessor commands.	7M
	b)	Differentiate between text and binary files.	4M
	c)	Explain fseek() random accessing file function.	3M
5	a)	Explain different DMA functions with an example program.	8M
	b)	Write a C program to demonstrate call by value parameter passing mechanism.	6M
6	a)	Explain binary search algorithm with an example.	7M
	b)	Arrange the following numbers in ascending order using Selection sort: 19, 12, 6, 13, 9, 0, 11, 10, 1	7M
7	a)	Write an algorithm to find a given number is prime or not?	7M
	b)	Define a recursion? Write a C program to find the sum of first n natural numbers using recursion.	7M
8	a)	Define a structure? Explain array of structures with an example.	7M
	b)	Explain different file input and output functions with an example program.	7M

---oo0oo---